

**REMARKS/ARGUMENTS**

**Status of the claims**

Claims 1-7, 12-18, 20-24, and 27 were previously undergoing examination.

Claims 19, 25 and 26 stand withdrawn as embracing non-elected species. Claims 1 and 7 are herein amended.

Claims 1-7, 12-18, 20-24, and 27 stand rejected under 35 U.S.C. 112, first paragraph, as allegedly lacking in enablement.

Claims 1-7, 12-15, 18, 20-24, and 27 stand rejected under 35 U.S.C. 103(a) as being allegedly being unpatentable over Cryz et al. (Vaccine, 1995) as evidenced by Cryz et al. (Infection and Immunity, 1986) in view Pastan et al. (U.S. Patent 5,328,984) and Bukawa et al. (Nature Medicine, 1995).

Claim 16 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Cryz et al. (Vaccine, 1995) as evidenced by Cryz et al. (Infection and Immunity, 1986) in view Pastan et al. (U.S. Patent 5,328,984) and Bukawa et al. (Nature Medicine, 1995) as applied to claim 1 and further in view of Cardy et al. (W095131483 of record in IDS of 7/7/2006).

Claim 17 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Cryz et al. (Vaccine, 1995) as evidenced by Cryz et al. (Infection and Immunity, 1986) in view Pastan et al. (U.S. Patent 5,328,984) and Bukawa et al. (Nature Medicine, 1995) as applied to claim 1 and further in view of Roberge et al. (Journal of Immunology, 1989, Vol. 143, p. 3498-3502).

**Support for the amendments to the claims**

Support for the epitope domain amendments of claim 1 are found in the specification in the paragraph bridging pages 30 and 31.

Claim 7 was amended to conform with the antecedent basis provided by claim 1.

Accordingly, the Applicants believe the amendments to the claims add no new matter and respectfully request their entry.

**Response to the rejection of claims 1-7,12-18,20-24, and 27 stand rejected under 35 U.S.C. 112, first paragraph, as allegedly lacking in enablement.**

In the spirit of expediting prosecution and without acquiescing on the merits, the Applicants have amended the base claim to set forth the subject matter the Examiner indicated to be enabled. Accordingly, the Applicants respectfully request that the above grounds for rejection be reconsidered and withdrawn.

**Response to the rejection of claims 1-7, 12-15, 18,20-24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cryz et al. (Vaccine, 1995) as evidenced by Cryz et al. (Infection and Immunity, 1986) in view Pastan et al. (U.S. Patent 5,328,984) and Bukawa et al. (Nature Medicine, 1995).**

In the spirit of expediting prosecution and without acquiescing on the merits, the Applicants have amended the base claim to set forth "an epitope presenting domain of between 5 and 350 amino acids in length and consisting essentially of one cysteine-cysteine loop wherein the loop encodes an epitope of a pathogen and wherein the epitope is non-native to PE domain Ib and the cysteine to cysteine loop encoding the pathogen replaces the cysteine- cysteine loop of domain Ib."

*None* of the cited references teach or suggest specifically replacing the cysteine-cysteine loop *portion* of domain Ib with a cysteine-cysteine loop encoding an epitope of a pathogen. Accordingly, the Applicants respectfully request that the above grounds for rejection be reconsidered and withdrawn.

**Response to the rejection of claim 16 under 35 U.S.C. 103(a) as being unpatentable over Cryz et al. (Vaccine, 1995) as evidenced by Cryz et al. (Infection and Immunity, 1986) in view Pastan et al. (U.S. Patent 5,328,984) and Bukawa et al. (Nature Medicine, 1995) as applied to claim 1 and further in view of Cardy et al. (W095131483 of record in IDS of 7/7/2006).**

As Cardy et al. do not supply the deficiency of the other references with respect to the cysteine-cysteine loop subject matter, the Applicants respectfully request that the above grounds for rejection be reconsidered and withdrawn.

**Response to the rejection of claim 17 under 35 U.S.C. 103(a) as allegedly being unpatentable over Cryz et al. (Vaccine, 1995) as evidenced by Cryz et al. (Infection and Immunity, 1986) in view of Pastan et al. (U.S. Patent 5,328,984) and Bukawa et al. (Nature Medicine, 1995) as applied to claim 1 and further in view of Roberge et al. (Journal of Immunology, 1989, Vol. 143, p. 3498-3502).**

As Roberge et al. do not supply the deficiency of the other references with respect to the cysteine-cysteine loop subject matter, the Applicants respectfully request that the above grounds for rejection be reconsidered and withdrawn.

**CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 925-472-5000.

Respectfully submitted,



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